

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau

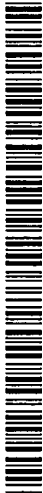


(43) International Publication Date  
3 January 2002 (03.01.2002)

PCT

(10) International Publication Number  
**WO 02/01459 A2**

- (51) International Patent Classification<sup>7</sup>: **G06F 17/60**
- (21) International Application Number: PCT/US01/19965
- (22) International Filing Date: 25 June 2001 (25.06.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/213,483 23 June 2000 (23.06.2000) US
- (71) Applicant (*for all designated States except US*): **E-MOTIVATION, INC.** [US/US]; Heritage Building, 321 South Main Street, Suite 100C, Providence, RI 02903 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): **CRAWFORD, Chris, J.** [US/US]; c/o E. Motivation, Inc., Heritage Building, 321 South Main Street, Suite 100C, Providence, RI 02903 (US).
- (74) Agents: **WIELAND, Charles, F., III** et al.; Burns, Doane, Swecker & Mathis, I.J.P., P.O. Box 1404, Alexandria, VA 22313-1404 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with declaration under Article 17(2)(a); without abstract;  
title not checked by the International Searching Authority
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*



**WO 02/01459 A2**

(54) Title: ELECTRONIC NETWORK BASED JEWELRY EXCHANGE PURCHASING HUB

(57) Abstract:

-1-

## **ELECTRONIC NETWORK BASED JEWELRY EXCHANGE PURCHASING HUB**

### **BACKGROUND OF THE INVENTION**

#### **1) Field of the Invention**

5       The present invention is an automated electronic shopping arrangement wherein images and descriptions of jewelry items are presented, and more particularly to a purchasing hub to provide a seamless electronic network to sort, merchandise, order and track jewelry from a multitude of jewelry manufacturers.

#### **2) Description of Related Art**

10       Currently, the jewelry market in the United States is extraordinarily fractured. The local marketplace controls it. There are currently a total of over 43,000 jewelry stores in the United States and over 25,000 are independent jewelers. Further, there are very few major jewelry outlets, such as Zales, Service Merchandise, Tiffany and Saks which can be considered national players.

15       Similarly, the manufacturers of jewelry are fractured. Most are small and many are family owned. There are few manufacturers with sales in excess of 75 million dollars. Further, the jewelry market is largely an unbranded business wherein customers do not necessarily know who the manufacturer was. The fracturing of the market, both for retailers, wholesalers and manufacturers means  
20       that the pricing can be somewhat arbitrary and inefficiencies exist.

      For instance, manufacturers have to employ skilled salespeople to seek outlets for the manufactured jewelry. To justify these sales efforts, at least \$10,000.00 worth of jewelry should be sold and sometimes up to 20% of the sales revenue is consumed by the sales force which is required to access the thousands  
25       of retailers and wholesalers, which increases the transaction costs.

      Also, it would be of great advantage if purchasing decisions could be effectively made based on both quality and price without requiring the purchaser to see an actual, physical sample of the jewelry. Currently purchasers using catalogs and on-line catalogs may be able to view the front of the jewelry piece. The  
30       quality, however, is often determined from examining the back, interior and sides

-2-

of the piece. This is because the quality of jewelry can often be seen in and determined by the craftsmanship of the mounts, clasps, etc.

Additionally, manufacturers are often burdened by inventory requirements (both over-stocking and under-stocking) and material procurement requirements  
5 due to these inefficiencies of the system.

Further, many of the retailers are too small to be able to maintain a high quality web site, and particularly unable or unwilling to maintain one that is periodically updated to reflect current product lines. Hence, there is a need to reduce the burden on individual retailers for maintaining their own up-to-date web  
10 sites to promote competition among retailers and the sale of the goods being offered.

Overall, there is a need for a unifying force in the market to increase efficiencies and make pricing more competitive.

#### SUMMARY OF THE INVENTION

15 The present invention allows corporate buyers, independent jewelers, wholesalers and any type of buyer to purchase jewelry worldwide in seconds, and as the jewelry is needed. These potential buyers would no longer have to rely upon regional factories and preexisting or newly established relationships. The buyers can shop from a multitude of manufacturers within seconds, rather than the  
20 laborious process of accessing product catalogs, accessing any existing manufacture web sites or directly contacting manufacturers. Additionally, it would no longer be necessary to order quantities of product at a time. Further, the independent jeweler and the corporate buyer becomes less reliant on the individual companies and a company's minimum purchasing requirements, open orders,  
25 inventory requirements like in balancing requirements, display requirements, etc. Hence, independent jewelers and corporate buyers will be able to compete with large jewelry chains through better inventory management and product procurement due to use of the present invention.

30 Additionally, the present invention will provide a marketplace for manufacturers worldwide and will enable manufacturers to access thousands of retailers and wholesalers at a fraction of what it has traditionally cost. This will

-3-

enable manufacturers to improve manufacturing abilities as well as ancillary needs such as raw material procurement and inventory, drop shipping, etc. Additionally, larger sales forces can be reduced while increasing profits across the board.

The present invention is provided by a seamless electronic network based  
5 purchasing hub which permits buyers to view, sort merchandise, order and track jewelry from thousands of different manufacturers.

Such a purchasing hub can be placed on the worldwide web in a password protected site. Buyers would be able to source and download high-resolution digital images, which are either two-dimensional or three-dimensional or both, to  
10 drop into their electronic or print programs. Further, the web site will be voice/audio enabled to provide education and information to the buyer as to options, quality, price, etc.

The purchasing hub will be able to extend market reach across global supplied basis, instantaneously sharing information and collaboration across supply  
15 chains to grow revenue, reduce cost, and speed time to market. Purchasing hub will create volume realization, virtual environments for viewing the products, providing digital security and multimedia publishing, all usable through a human/computer interaction. The purchasing hub can provide 3-D computer graphics and voice/audio-enabled environment. In accomplishing these goals, the  
20 purchasing hub will provide a friendly, convenient, ubiquitous platform to see and coordinate the entire chains of jewelry lines.

A key is to enable buyers an opportunity to source and merchandise their jewelry at non-retail prices by access over a password protected web site that allows the buyer to view large selections of product broken down by price, types,  
25 styles, etc. Samples items are not required.

Additionally, manufacturers and resellers will be able to substitute the presentation of information in place of inventory to create a greater supply chain transparency. Manufacturers will be able to present buyers with richer, personalized purchasing experiences with cross-selling opportunities. Buyers will  
30 be able to use this information to procure cheaper, better, higher quality and more readily available product depending on their immediate needs.

-4-

## BRIEF DESCRIPTION OF THE DRAWING FIGURES

The present invention will now be described by exemplary embodiments, to which the invention is not limited, as illustrated in the accompanying drawings, in which:

5           Figure 1 is a high level schematic diagram of an electronic network, such as the Internet; and

            Figure 2 is a flowchart showing the interaction of a manufacturer and potential buyer with the jewelry exchange-purchasing hub.

## DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

10           The present invention is embodied in the method for providing electronic network based jewelry purchasing hub, such as shown in Figure 1. The present invention can be embodied in an electronic network 10 to which jewelry manufacturers 11, the jewelry purchasing hub 12 and jewelry retailers 13 are connected. For simplicity, only one manufacturer 11 and only one retailer 13 are  
15           shown purposes for illustration, but of course many others would be connected by way of a public or private electronic network. The electronic network can be the worldwide web including the Internet, another public network, or a private network. The jewelry manufacturer has a PC 11 or other form of computer terminal (network enabled televisions, personal digital assistants, wireless  
20           telephones, hybrids thereof, etc.) capable of displaying images and other forms of information on a display 11a and capable of inputting information through an input device such as a touch pad, stylus pad, keyboard 11b and/or a mouse 11c.

            The purchasing hub 14 includes a computer 12, which can be a mainframe, a PC, or the like which also includes a display 12a and an input device such as a  
25           keyboard 12b and a mouse 12c. Naturally, more than one computer 12 can be used in the purchasing hub 14. Also, the purchasing hub 14 could have a server 12d either integrated with or separate from the computer 12 likely storing manufacturing, ordering, and tracking information in relational databases, for instance.

30           Jewelers and other buyers would have a computer 13 such as a PC which includes a display device 13a, an input device such as a keyboard 13b and a mouse

-5-

13c. The computer 13 can also be in the form of a mobile device, such as web enabled PDAs and wireless telephones, or non-general computers such as web-enabled televisions.

5 As illustrated in Figure 2, the method providing the electronic network base jewelry-purchasing hub includes establishing a network of jewelry manufacturers (Step 21). This step can entail manufacturers being contacted or contacting the purchasing hub providers by oral (telephone or personal meetings), electronic or paper communication to establish a relationship with a purchasing hub.

10 As shown in Step 22, the present invention also includes establishing a network or purchasers, such as retailers, wholesalers or corporations interested in buying jewelry from manufacturers at below retail value, for instance. The order of this step relative to steps 21-23 can be changed.

15 Another step 23 is to collect information from manufacturers about the jewelry merchandise. This information can include images which can be 3-dimensional images, and additional information which may include one or more of the following categories of information: price, type of jewelry (e.g., ring, bracelet, watch, diamond goods, earrings, pearls, tennis bracelets, and so forth) style, quality, quantity (e.g., available inventory) manufacturer name, size, 20 colored covered materials, digital images or other images of the jewelry, age, rarity, historical significance or other information, uniqueness, the designer, the artisan, the country of origin, the origin of the materials, or combinations of this information.

25 The information collected from the manufacturer assist in merchandising the jewelry, as shown in step 24. The merchandising can take the form of providing retailers with a template web store which looks like a web site through which a customer can browse products in the store or remotely over a public or private electronic network (e.g., the Internet). The contents of the template web store including the information about the products is provided by the purchasing 30 hub, but the exterior appearance of the web store identifies the retailer, i.e., the identification banner is that of the store, and not necessarily the purchasing hub or the manufacturer. The web store template can in preferred embodiments update the

-6-

contents of the retailer's web store template with information collected from manufactures about the jewelry ordered by the retailer or other non-retail buyer. This has the added advantage of promoting sales of the participating manufactures since only their jewelry would appear on the retailer's web store, which is  
5 viewable either over a public network like the Internet or over an in-store or other type of private network or both.

The purchasing hub 14 will also provide information to educate the purchaser (as shown in Step 25) whether the purchaser is the retailer or the retailer's customer, for instance. This information can be provided by voice/audio  
10 enabled technology, i.e., that an audible voice informs the prospective purchaser about the product being clicked upon or like mechanism. The audible voice can be in the form of a sound track accompanying the two or three dimensional images, can be separate sound recordings or can be computer generated speech based on written text using conventional software, firmware and hardware. For instance,  
15 such audio and image information can be presented using technology similar to that disclosed in U.S. Patent No. 6,201,546 issued to Bodor et al., herein incorporated by reference.

The information about the jewelry can also be sorted as identified in Step 26. The sorting can include sorting the information by category including such  
20 categories price, type, style, quality, quantity, manufacturer name, size, color, materials, availability, image, age, rarity, historical information, uniqueness, designer, artisan, country origin, origin of materials and combinations thereof, or any other information that perspective purchasers care to review and manufacturers care offer. Additional services can be requested such as viewing  
25 images of the jewelry, as shown in Step 27. The viewing step can include downloading two- and/or three-dimensional images or the jewelry. The user is freely able to choose additional services, as shown in Step 28, and in an interactive manner on the purchasing hub.

After the potential purchaser has viewed sufficient information, the  
30 purchaser can select the jewelry he or she desires to purchase, as shown in Step 29. Thereafter, the jewelry is ordered, as shown in Step 30. After the jewelry is selected, the jewelry can be ordered, which may include such additional steps as

-7-

approving credit, or transferring funds electronically. The ordering Step 30 also includes forwarding the order directly to the manufacturer so that the transaction appears to be seamless from the perspective of the purchaser.

After ordering, the order can be tracked, both during the manufacturing  
5 process and during the shipping process.

It should be noted that the entire platform for the purchasing hub 14 could be provided by Oracle. Additional services not shown in Figure 2 can include such things as an online educational program, AGS certification, information about the manufacturer and links to their web pages, etc. The web site can be publicly  
10 accessible, but preferably as a password protected web site. Also, the purchasing hub 14 can make available templates for receiving instructions as to customizing jewelry for manufacturers and facilitate communication between manufacturers and purchasers for pricing and other criteria on specific, custom orders.

Additionally, the ordering system will be seamless in preferred  
15 embodiments. The purchaser of the product will not need to do anything other than to interact with the web site. Credit is approved by such authorities as Dunn and Bradstreet and fed directly to the manufacturer, where the work order can be printed out or otherwise processed to fit their internal manufacturing environment.

The tracking can be accomplished by tracking numbers which are emailed  
20 with shipping notification, and billing is equally seamless and so far as the buyers can simply transfer funds electronically.

It will also be appreciated that the present invention in providing such a purchasing hub currently extends the available inventory and cross selection of goods. Even the largest of manufacturers do not represent such a large cross  
25 section of goods but tend to focus on one or two areas in which they might excel. By putting together multiple manufacturers with multitude potential purchasers, greater product selection and access to the products is facilitated.

Also, the retailer does not need to maintain as large an inventory, but rather can purchase only what is required and purchase it only when it is required.  
30 Also, the mechanics of the purchasing hub facilitates, choosing products, reviewing sales presentations, getting and comparing samples, verifying quality, ensuring timely delivery, obtaining photos/transparencies, products specs,



-8-

packaging options, etc. without the enormous time consumption and expense required prior to the present invention.

The searching capabilities of the purchasing hub permits the user to search by category, cost, quality of the stones and weight of the gold content, speeded  
5 delivery, etc. in order to facilitate their selection of manufacturer and product.

As used herein, the meaning of "jewelry" includes more than just ornaments made of precious metals set with gems or from imitation materials. Herein "jewelry" includes watches, bracelets, pens and any other personal ornamental and ornamental/functional pieces typically sold in jewelry retail stores  
10 and jewelry catalogs.

The present invention has been described by way of exemplary embodiments, to which it is not limited. Modifications and variations will occur to those skilled in the art to not to part from the scope of the present invention as defined by the claims appended hereto.

-9-

What is claimed is:

1. A method of providing an electronic network based jewelry purchasing hub, comprising:
  - establishing a network of jewelry manufacturers willing to market jewelry
  - 5 on said purchasing hub;
  - establishing a network of at least one of jewelry non-retail buyer willing to buy jewelry on said purchasing hub;
  - collecting information about said jewelry; and
  - merchandising said jewelry.
- 10 2. The method according to claim 1, further comprising informing potential purchasers about said jewelry.
3. The method according to claim 1, further comprising sorting said information about said jewelry.
4. The method according to claim 1, further comprising viewing said
- 15 images of said jewelry.
5. The method according to claim 1, further comprising selecting said jewelry.
6. The method according to claim 1, further comprising ordering selected items of said jewelry.
- 20 7. The method according to claim 1, further comprising tracking jewelry orders.
8. The method according to claim 4, wherein said viewing step includes downloading 3-D digital images of said jewelry.

-10-

9. The method according to claim 2, wherein said informing step includes providing a voice enabled web site.

10. The method according to claim 1, wherein said merchandising step includes providing retailers with a template web store, the contents of which are  
5 provided by said purchasing hub, but the identification banner is that of the non-retail buyer.

11. The method according to claim 10, wherein said web store template providing step includes updating the contents of said web store template with said  
10 collected jewelry information about jewelry ordered by said non-retail buyer.

12. The method according to claim 3, wherein said sorting step includes sorting said information by a category selected from the following categories: price, type, style, quality, manufacture, name, size, color, materials, availability, image, age, rarity, historical information, uniqueness, designer, artisan, country of  
15 origin, origin of materials and combinations thereof.

13. The method according to claim 6, wherein said ordering step includes approving credit.

14. The method according to claim 6, wherein said ordering step includes transferring funds electronically.

20 15. The method according to claim 6, wherein said ordering step includes forwarding said order to a selected manufacturer.

16. The method according to claim 7, wherein said tracking step includes tracking ordered jewelry during manufacture.

25 17. The method according to claim 7, wherein said tracking step includes tracking ordered jewelry during shipment.

18. A method of providing a web store to a retailer, comprising the steps of:

establishing a business relationship between a jewelry purchasing hub and a retailer;

5 providing said retailer with a template web store, the contents of which are provided by said purchasing hub, but the identification banner is that of the non-retail buyer; and

updating the contents of said web store template with information about jewelry ordered by retailer.

10 19. A method of providing information about jewelry, comprising the steps of:

providing access to a network site to prospective jewelry purchasers;

transmitting to said perspective purchaser three-dimensional images of said jewelry;

15 transmitting supplemental information about the jewelry in addition to said three-dimensional images of said jewelry.

20. The method according to claim 19, further comprising the step of presenting said supplemental information as audible speech.

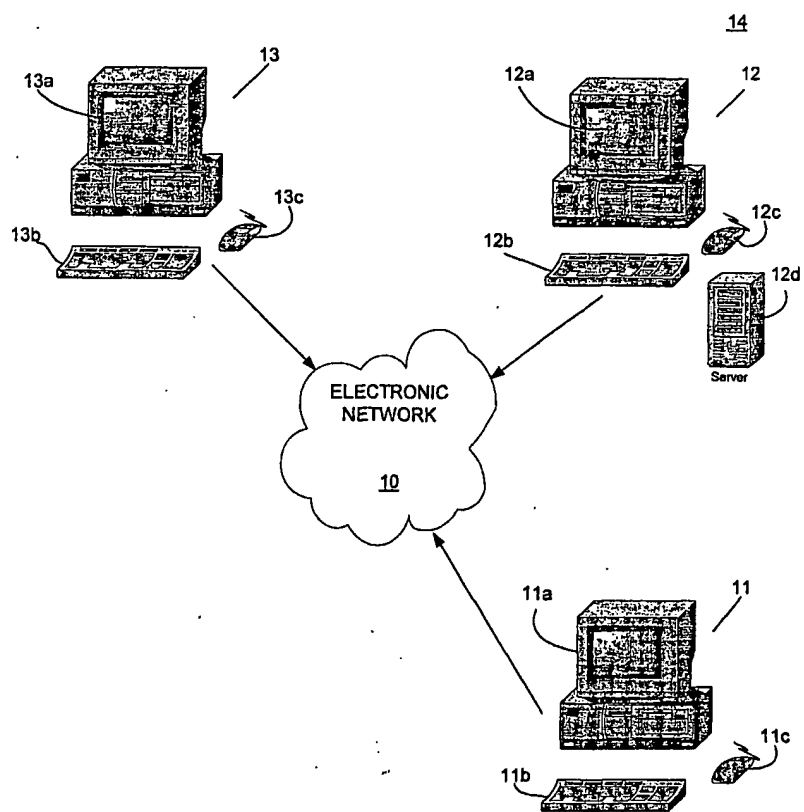
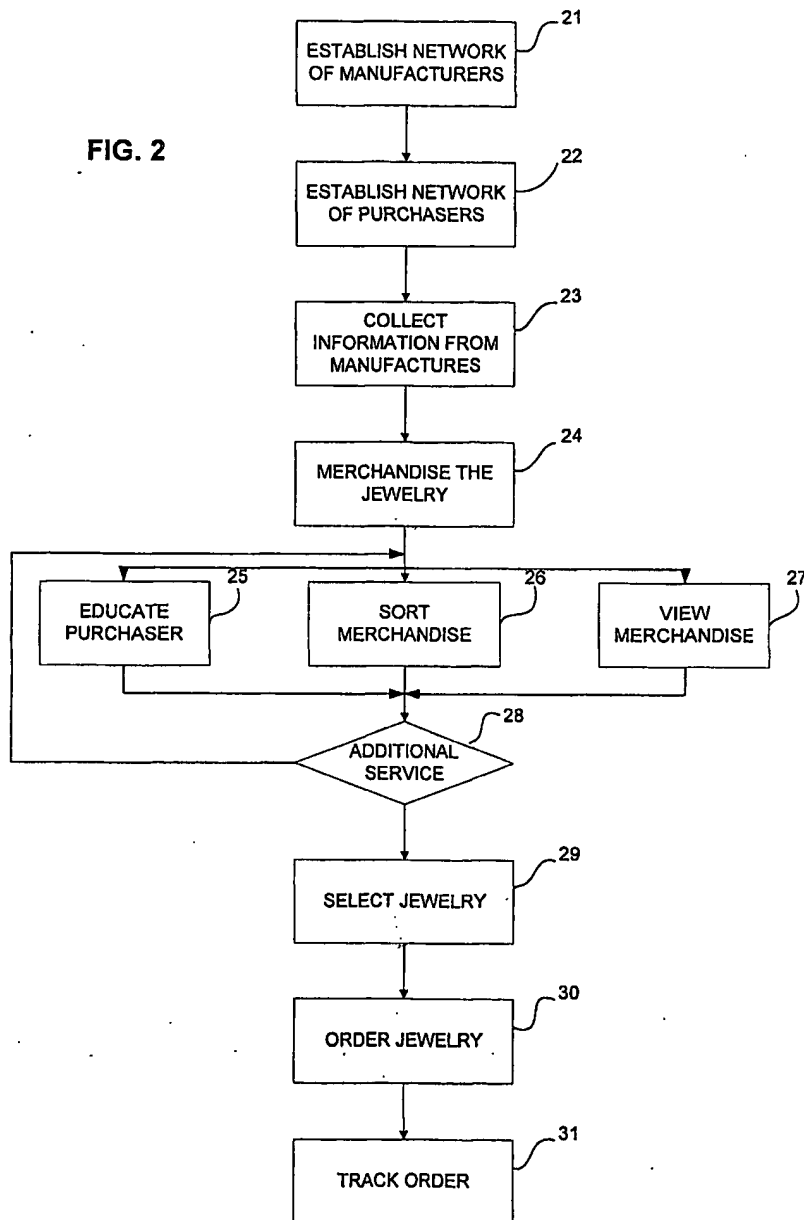


FIG. 1

2/2

FIG. 2



# PATENT COOPERATION TREATY

## PCT

### DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL SEARCH REPORT

(PCT Article 17(2)(a), Rules 13ter.1(c) and Rule 39)

Applicant's or agent's file reference <b>033047-002</b>	IMPORTANT DECLARATION	Date of mailing(day/month/year) <b>17/09/2001</b>
International application No. <b>PCT/US 01/ 19965</b>	International filing date(day/month/year) <b>25/06/2001</b>	(Earliest) Priority date(day/month/year) <b>23/06/2000</b>
International Patent Classification (IPC) or both national classification and IPC <b>G06F17/60</b>		
Applicant <b>E-MOTIVATION, INC. et al.</b>		

This International Searching Authority hereby declares, according to Article 17(2)(a), that no International search report will be established on the international application for the reasons indicated below

1. ☒ The subject matter of the international application relates to:
  - a. ☐ scientific theories.
  - b. ☐ mathematical theories
  - c. ☐ plant varieties.
  - d. ☐ animal varieties.
  - e. ☐ essentially biological processes for the production of plants and animals, other than microbiological processes and the products of such processes.
  - f. ☒ schemes, rules or methods of doing business.
  - g. ☐ schemes, rules or methods of performing purely mental acts.
  - h. ☐ schemes, rules or methods of playing games.
  - i. ☐ methods for treatment of the human body by surgery or therapy.
  - j. ☐ methods for treatment of the animal body by surgery or therapy.
  - k. ☐ diagnostic methods practised on the human or animal body.
  - l. ☐ mere presentations of information.
  - m. ☐ computer programs for which this International Searching Authority is not equipped to search prior art.
2. ☐ The failure of the following parts of the international application to comply with prescribed requirements prevents a meaningful search from being carried out:
 

☐ the description
 ☐ the claims
 ☐ the drawings
3. ☐ The failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions prevents a meaningful search from being carried out:
 

☐ the written form has not been furnished or does not comply with the standard.
 ☐ the computer readable form has not been furnished or does not comply with the standard.
4. Further comments:

Name and mailing address of the International Searching Authority European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  <b>María Rodríguez Nóvoa</b>
--	--

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 203

The subject-matter claimed in claims 1 to 20 falls under the provisions of Article 17(2)(a)(i) and Rule 39.1(iii) PCT, such subject-matter relating to a method of doing business.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.